

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims

Claims 1-3 (cancelled)

Claim 4 (original): A filterable composite adsorbent comprising:

one or more adsorbent components selected from the group consisting of silica gel, fumed silica, neutral clay, alkaline clay, zeolite, solid catalyst, alumina, adsorbent polymer, and alkaline earth silicate hydrate;

intimately bound to one or more functional filtration components selected from the group consisting of diatomite, rice hull ash, sponge spicules, expanded perlite, pumice, expanded pumice, pumicite, expanded obsidian, expanded volcanic ash, natural glass, buoyant glass, buoyant polymer, and cellulose.

Claim 5 (original): The filterable composite adsorbent according to claim 4, wherein said adsorbent component is selected from the group consisting of silica gel and fumed silica.

Claims 6 - 10 (cancelled)

Claim 11 (original): The filterable composite adsorbent according to claim 4, wherein said functional filtration component is selected from the group consisting of expanded perlite, pumice, expanded pumice, pumicite, expanded obsidian, and expanded volcanic ash.

Claim 12 (original): The filterable composite adsorbent according to claim 4, wherein said functional filtration component is expanded perlite.

Claims 13 - 14 (cancelled)

Claim 15 (original): A filterable composite adsorbent comprising silica gel intimately bound to a material selected from the group consisting of expanded perlite, pumice, expanded pumice, pumicite, expanded obsidian, and expanded volcanic ash.

Claim 16 (original): A filterable composite adsorbent comprising silica gel intimately bound to expanded perlite.

Claims 17- 49 (cancelled)

Claim 50 (original): A method of adsorption and filtration comprising the step of (i) suspending a filterable composite adsorbent according to claim 4 in a fluid containing suspended particulates or constituents to be adsorbed, followed by the step of (ii) separating said filterable composite adsorbent from said fluid.

Claim 51 (original): A method of adsorption and filtration comprising the step of (i) suspending a filterable composite adsorbent according to claim 4 in a fluid containing suspended particulates or constituents to be adsorbed, followed by the step of (ii) passing said fluid with suspended filterable composite adsorbent through a filterable composite adsorbent according to claim 4 supported on a septum.

Claim 52 (original): A method of adsorption and filtration comprising the step of passing a fluid containing suspended particles or constituents to be adsorbed through a filterable composite adsorbent according to claim 4 which is supported on a septum.

Claim 53 (original): A method of adsorption and filtration comprising the step of passing a fluid containing suspended particles or constituents to be adsorbed through a filterable composite adsorbent according to claim 4 which is in the form of a rigid shape.

Claim 54 (original): A method of adsorption and filtration according to claim 50, wherein said fluid is a liquid, a molten solid, or a gas.

Claim 55 (original): A method of adsorption and filtration according to claim 51, wherein said fluid is a liquid, a molten solid, or a gas.

Claim 56 (original): A method of adsorption and filtration according to claim 52, wherein said fluid is a liquid, a molten solid, or a gas.

Claim 57 (original): A method of adsorption and filtration according to claim 53, wherein said fluid is a liquid, a molten solid, or a gas.

Claim 58 (original): A method for the preparation of a filterable composite adsorbent according to claim 4, said method comprising the steps of (i) blending one or more adsorbent components with one or more functional filtration components, and (ii) applying microwave radiation applied to the blend, thereby forming said filterable composite adsorbent.